

IMPORTANT NOTICE

Due to potential delays in receiving mail, this solicitation contains the provision at FAR 52.215-5 which authorizes facsimile proposals. Offerors are encouraged to use alternatives to the mail when submitting proposals.

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING		PAGE OF 1 26 PAGES	
2. CONTRACT NO.		3. SOLICITATION NO. N00173-02-R-MM03		4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 14 June 2002	
7. ISSUED BY CONTRACTING OFFICER NAVAL RESEARCH LABORATORY ATTN: CODE 3230.MM WASHINGTON DC 20375-5326				6. REQUISITION/PURCHASE NO.			
8. ADDRESS OFFER TO (If other than Item 7)							

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and 2 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in BUILDING 222, ROOM 115 until 4:00 local time 16 July 2002
(Hour) (Date)

CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME Marita F. Thompson, Contract Specialist	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (202) 767-0666 (thompson@contracts.nrl.navy.mil)
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OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52-232-8)	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %
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14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
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15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE. <input type="checkbox"/>	17. SIGNATURE	18. OFFER DATE
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) <input type="checkbox"/> ITEM
24. ADMINISTERED BY (If other than Item 7)	CODE	25. PAYMENT WILL BE MADE BY <input type="checkbox"/> CODE

26. NAME OF CONTRACTING OFFICER (Type or print)	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE
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IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

PART I - THE SCHEDULE
SECTION B
SUPPLIES OR SERVICES AND PRICES/COSTS

B-1 SUPPLIES/SERVICES AND COSTS

ITEM NUMBER	SUPPLIES/SERVICES	ESTIMATED COST	FIXED FEE	ESTIMATED COST PLUS FIXED FEE
0001	The Contractor shall provide the necessary personnel, equipment and facilities to accomplish the work as described in in Section C.	\$	\$	\$
000101	ACRN: AA			
000102	ACRN: AB			
0002	Data in accordance with Exhibit A (DD 1423)	* NSP	* NSP	* NSP
TOTAL ESTIMATED COST PLUS FIXED FEE			\$	\$

** Not Separately Priced*

NOTICE TO OFFERORS: In addition to inserting the estimated cost and fixed fee for the base year above, the estimated cost and fixed fee for each optional extension of the term of the contract are to be inserted in Section H.

SECTION C
DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C-1 STATEMENT OF WORK

The work and services to be performed hereunder shall be subject to the requirements and standards contained in Attachment (1), Statement of Work, with Exhibit A, Contract Data Requirements List, and all other Attachments cited in Section J, which are incorporated by reference into Section C.

C-2 REQUIREMENTS FOR ON-SITE CONTRACTORS

For those portions of the work under this contract performed at any NRL site, the contractor shall comply with the Requirements for On-Site Contractors dated 19 October 2001 which are hereby incorporated by reference. The full text is available at <http://heron.nrl.navy.mil/contracts/home.htm>.

**SECTION D
PACKAGING AND MARKING****D-1 PACKAGING AND MARKING**

Preservation, packaging, packing and marking of all deliverable contract line items must conform to normal commercial packing standards to assure safe delivery at destination.

**SECTION E
INSPECTION AND ACCEPTANCE****E-1 INSPECTION AND ACCEPTANCE CLAUSES INCORPORATED BY REFERENCE****FAR CLAUSE TITLE**

52.246-5 - Inspection Of Services - Cost Reimbursement (APR 1984)

DFARS CLAUSE TITLE

252.246-7000 - Material Inspection And Receiving Report (DEC 1991)

E-2 INSPECTION AND ACCEPTANCE

Inspection and acceptance of the final delivery will be accomplished by the Technical Manager (TM) or Contracting Officer Representative (COR) designated in Section G of this contract. Inspection and acceptance will be performed at the Naval Research Laboratory, Washington DC 20375-5320.

**SECTION F
DELIVERIES OR PERFORMANCE****F-1 DELIVERIES OR PERFORMANCE CLAUSES INCORPORATED BY REFERENCE:****FAR CLAUSE TITLE**

52.242-15 - Stop-Work Order (AUG 1989) - Alternate I (APR 1984)

52.247-34 - F.O.B. Destination (NOV 1991)

F-2 PERIOD AND PLACE OF PERFORMANCE

- (a) The term of this contract is from date of contract award through twelve (12) months thereafter with four (4) options that will extend the period of performance for an additional twelve (12) months each, if exercised.
- (b) The principal place of performance of this contract shall be Naval Research Laboratory, 4555 Overlook Avenue., S.W., Washington, D.C. 20375.

**SECTION G
CONTRACT ADMINISTRATION DATA**

G-1 PROCURING OFFICE REPRESENTATIVE

In order to expedite administration of the contract, the Administrative Contracting Officer (ACO) will direct inquiries to the appropriate office listed below. Please do not direct routine inquiries to the person listed in Item 20A on Standard Form 26.

Contract Matters- *

Security Matters- *

Safety Matters- *

Patent Matters- *

Release of Data- *

The ACO will forward invention disclosures and reports directly to the Associate Counsel for Patents, Code 1008.2, Naval Research Laboratory, Washington DC 20375-5320. The Associate Counsel for Patents will return the reports along with a recommendation to the Administrative Contracting Officer. The Associate Counsel for Patents will represent the Contracting Officer with regard to invention reporting matters arising under this contract.

*(* To be completed at time of award)*

G-2 CONTRACTING OFFICER'S REPRESENTATIVE (COR) - FUNCTIONS AND LIMITATIONS

* is hereby designated the cognizant COR who will represent the Contracting Officer in the administration of technical details within the scope of this contract and inspection and acceptance. The COR is not otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Government. The COR does not have the authority to alter the Contractor's obligations or change the specifications in the contract. If, as a result of technical discussions, it is desirable to alter contract obligations or statements of work, a modification must be issued in writing and signed by the Contracting Officer. The COR is responsible for reviewing the bills and charges submitted by the Contractor and informing the ACO of areas where exceptions are to be taken.

(* To be completed at time of award)

G-3 TECHNICAL DIRECTION MEMORANDUM (TDM)

- (a) For the purposes of this clause, technical direction includes the following:
 - (1) Direction to the Contractor which shifts work emphasis between work areas or tasks, requires pursuit of certain lines of inquiry, fills in details or otherwise describes work which will accomplish the objectives described in the statement of work;
 - (2) Guidelines to the Contractor which assist in interpretation of drawings, specifications or technical portions of work description.
- (b) Technical instructions must be within the scope of work stated in the contract. Technical instructions may not be used to:
 - (1) Assign additional work under the contract;
 - (2) Direct a change as defined in the contract clause entitled "Changes";
 - (3) Increase or decrease the estimated contract cost, the fixed fee, or the time required for contract performance; or
 - (4) Change any of the terms, conditions or specifications of the contract
- (c) The TDM shall be written by the Contracting Officer's Representative (COR), with the original given to the Contractor and a copy retained in the CORs file. Technical direction may be issued orally only in emergency situations. If technical direction is issued orally, a TDM must follow within two (2) working days from the date of the oral direction. Amendments, corrections, or changes to TDMs shall also be in written format and shall include all the information set forth in paragraph (e) below.
- (d) A TDM shall be considered issued when the Government deposits it in the mail, or if transmitted by other means, when it is physically delivered to the contractor.
- (e) TDMs shall include, but not be limited to, the following information:
 - (1) Date of TDM,
 - (2) Contract Number,
 - (3) Reference to the relevant portion or item in the Statement of Work,
 - (4) The specific technical direction or clarification, and
 - (5) The signature of the COR.
- (f) CORs shall retain all files containing TDMs for a period of two (2) years after the final contract completion date.
- (g) The only individual authorized in any way to amend or modify any of the terms of this contract shall be the Contracting Officer. When, in the opinion of the Contractor, any technical direction calls for effort

outside the scope of the contract or inconsistent with this special provision, the Contractor shall notify the Contracting Officer in writing within ten (10) working days after its receipt.

G-4 CONTRACTOR-ACQUIRED PROPERTY

(a) The contractor is authorized to acquire the following items of facilities which are needed to accomplish this contract.

Items to be Acquired

Estimated Cost

*

*(*this provision will be included and completed at time of award, if applicable)*

(b) This authorization does not constitute any consent required pursuant to the contract clause entitled "Subcontracts" (FAR 52.244-2). Advance notification or requests for consent pursuant to that clause shall be directed to the administrative contracting officer (ACO).

(c) Pursuant to the contract clause entitled "Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts)" (FAR 52.245-5), title to the property shall vest in the Government.

(d) Prior to acquisition of any item of Industrial Plant Equipment, the Contractor must comply with the requirements of Department of Defense Federal Acquisition Regulation Supplement (DFARS 245.302-1(b)(1)(A). (See DFARS 245.301 for definition of "Industrial Plant Equipment.")

G-5 SUBCONTRACTORS/CONSULTANTS

(a) Advance notification or requests for consent pursuant to the contract clause entitled "Subcontracts" (FAR 52.244-2) shall be directed to the cognizant administrative contracting officer (ACO).

(b) The following subcontractors/consultants have been identified in the Contractor's proposal as necessary for performance of this contract:

Subcontractor/Consultant Name

Estimated Cost

(Paragraph (b) will be included and filled in at time of award if subcontractor/consultants are proposed by the successful offeror)

G-6 NAPS 5252.232-9001 - SUBMISSION OF INVOICES (COST-REIMBURSEMENT, TIME-AND-MATERIALS, LABOR-HOUR, OR FIXED PRICE INCENTIVE (JUL 1992))

(a) "Invoice" as used in this clause includes contractor requests for interim payments using public vouchers (SF 1034) but does not include contractor requests for progress payments under fixed price incentive contracts.

(b) The Contractor shall submit invoices and any necessary supporting documentation, in an original and 4 copies, to the contract auditor at the following address:

(To be completed at time of award)

unless delivery orders are applicable, in which case invoices will be segregated by individual order and submitted to the address specified in the order. In addition, an information copy shall be submitted to [See Section G for designated COR]. Following verification, the contract auditor will forward the invoice to the designated payment office for payment in the amount determined to be owing, in accordance with the applicable payment (and fee) clause(s) of this contract.

(c) Invoices requesting interim payments shall be submitted no more than once every two weeks, unless another time period is specified in the Payments clause of this contract. For indefinite delivery type contracts, interim payment invoices shall be submitted no more than once every two weeks for each delivery orders. There shall be a lapse of no more than 30 calendar days between performance and submission of an interim payment invoice.

(d) In addition to the information identified in the Prompt Payment clause herein, each invoice shall contain the following information, as applicable:

- (1) Contract line item number (CLIN)
- (2) Subline item number (SLIN)
- (3) Accounting Classification Reference Number(ACRN)
- (4) Payment terms
- (5) Procuring activity
- (6) Date supplies provided or services performed
- (7) Costs incurred and allowable under the contract
- (8) Vessel (e.g., ship, submarine or other craft) or system for which supply/service is provided

(e) A DD Form 250, "Material Inspection and Receiving Report",

- ☐ is required with each invoice submittal.
☒ is required only with the final invoice.
☐ is not required.

(f) A Certificate of Performance

- ☐ shall be provided with each invoice submittal.
☒ is not required.

(g) The Contractor's final invoice shall be identified as such, and shall list all other invoices (if any) previously tendered under this contract.

(h) Cost of performance shall be segregated, accumulated and invoiced to the appropriate ACRN categories to the extent possible. When such segregation of costs by ACRN is not possible for invoices submitted with CLIN/SLINS with more than one ACRN, an allocation ratio shall be established in the same ratio as the obligations cited in the accounting data so that costs are allocated on a proportional basis.

G-7 INCREMENTAL FUNDING

Pursuant to the Limitation of Funds clause (FAR 52.232-22), the total amount allotted to this contract is \$* and it is estimated that this amount is sufficient for contract performance through * .

*(*this provision will be included and completed at time of award, if applicable)*

G-8 INFORMATIONAL SUBLINE ITEMS

It is anticipated that the research and development services performed under this contract will be paid for from multiple sources of funds. Informational subline items will be established as necessary to identify each accounting citation classification.

G-9 PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS (COST-REIMBURSEMENT)

The purpose of these instructions is to permit the paying office to charge the accounting classification citations in the contract in a manner that reflects the performance of the contract. These instructions do not create any obligation on the part of the Government or the contractor nor do they in any way alter any obligation created by any other provision of the contract. Invoices should be paid from available ACRNs in the following order:

- (a) ACRNs cited on the contractor's invoice.
- (b) On a proportional basis from any ACRNs assigned to funds which will cancel at the end of the current fiscal year.
- (c) The ACRN assigned to the following line of accounting:
97X4930.NH4A 000 77777 0 000173 2F 000000 N00173Z45000.
- (d) If funds appropriated in more than one fiscal year are allotted to the contract, the ACRN assigned to the oldest allotment of funds.
- (e) On a proportional basis from all ACRNs assigned to allotments of funds appropriated in a single fiscal year.

**SECTION H
SPECIAL CONTRACT REQUIREMENTS****H-1 TYPE OF CONTRACT**

This is a *

*(*To be completed at time of award)*

H-2 ONR 5252.237-9705 - KEY PERSONNEL (DEC 88)

- (a) The Contractor agrees to assign to the contract tasks those persons whose resumes were submitted with its proposal and who are necessary to fulfill the requirements of the contract as "key personnel". No substitutions may be made except in accordance with this clause.
- (b) The Contractor understands that during the first ninety (90) days of the contract performance period, no personnel substitutions will be permitted unless these substitutions are unavoidable because of the

incumbent's sudden illness, death or termination of employment. In any of these events, the Contractor shall promptly notify the Contracting Officer and provide the information described in paragraph (c) below. After the initial ninety (90) day period the Contractor must submit to the Contracting Officer all proposed substitutions, in writing, at least thirty (30) days in advance (sixty (60) days if security clearance must be obtained) of any proposed substitution and provide the information required by paragraph (c) below.

(c) Any request for substitution must include a detailed explanation of the circumstances necessitating the proposed substitution, a resume for the proposed substitute, and any other information requested by the Contracting Officer. Any proposed substitute must have qualifications equal to or superior to the qualifications of the incumbent. The Contracting Officer or his/her authorized representative will evaluate such requests and promptly notify the Contractor of his/her approval or disapproval thereof.

(d) In the event that any of the identified key personnel cease to perform under the contract and the substitute is disapproved, the contract may be immediately terminated in accordance with the Termination clause of the contract.

The following are identified as key personnel:

LABOR CATEGORY	First/M/Last Name of Person
Principal Research Scientist/Engineer	*
Research Scientist/Engineer	*
Master Engineer	*

*(*To be completed at time of award)*

H-3 ONR 5252.216-9706 - LEVEL OF EFFORT (DEC 88)

(a) The Contractor agrees to provide the total level of effort specified in the next sentence in performance of the work described in this contract. The total level of effort for performance of this contract shall be 7,100 total hours of direct labor for the base year and 7,100 total hours for direct labor for each of the option years, if exercised. This amount subcontractors direct labor for those subcontractors specifically identified in the Contractor's proposal as having hours included in the proposed level of effort. A breakdown of labor categories and hours is set forth in paragraph (k) below.

(b) The level of effort for this contract shall be expended at an average rate of 592 hours per month. It is understood and agreed that the rate of hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total hours of effort prior to the expiration of the term of the contract.

(c) The Contractor is required to notify the Contracting Officer when any of the following situations occur, or are anticipated to occur: If during any three consecutive months the monthly average is exceeded by 25% or, if at any time it is forecast that during the last three months of the contract less than 50% of the monthly average will be used during any given month; or, when 85% of the total level of effort has been expended.

(d) If, during the term of the contract, the Contractor finds it necessary to accelerate the expenditure of direct labor to such an extent that the total hours of effort specified would be used prior to the expiration of the term, the Contractor shall notify the Contracting Officer in writing, setting forth the acceleration required, the probable benefits which would result, and an offer to undertake the acceleration at no increase in the estimated cost or fixed fee together with an offer setting forth a proposed level of effort, cost breakdown, and proposed fixed fee for continuation of the work until expiration of the term hereof. The offer shall provide that the work proposed will be subject to the terms and conditions of this contract

and any additions or changes required by then current law, regulations, or directives, and that the offer, with a written notice of acceptance by the Contracting Officer, shall constitute a binding contract. The Contractor shall not accelerate any effort until receipt of such written approval by the Contracting Officer. Any agreement to accelerate will be formalized by contract modification.

(e) The Contracting Officer may, by written order, direct the Contractor to accelerate the expenditure of direct labor such that the total hours of effort specified in paragraph (a) above would be used prior to the expiration of the term. This order shall specify the acceleration required and the resulting revised term. The Contractor shall acknowledge this order within five days of receipt.

(f) If the total level of effort specified in paragraph (a) above is not provided by the Contractor during the term of this contract, the Contracting Officer shall either (i) reduce the fixed fee of this contract as follows:

$$\text{Fee Reduction} = \text{Fixed Fee} \times \frac{(\text{Required LOE Hours} - \text{Expended LOE Hours})}{\text{Required LOE Hours}}$$

or (ii) subject to the provisions of the clause of this contract entitled "Limitation of Cost," require the Contractor to continue to perform the work until the total number of hours of direct labor specified in paragraph (a) shall have been expended, at no increase in the fixed fee of this contract.

(g) In the event the government fails to fully fund the contract in a timely manner, the term of the contract may be extended accordingly with no change to cost or fee. If the government fails to fully fund the contract, the fee will be adjusted in direct proportion to that effort which was performed.

(h) Notwithstanding any of the provisions in the above paragraphs, the Contractor may furnish hours up to five percent in excess of the total hours specified in paragraph (a) above, provided that the additional effort is furnished within the term hereof, and provided further that no increase in the estimated cost or fixed fee is required, and no adjustment in the fixed fee shall be made provided that the Contractor has delivered at least 95% of the level of effort required in paragraph (a) above.

(i) It is understood that the mix of labor categories provided by the Contractor under the contract, as well as the distribution of effort among those categories, may vary considerably from the initial mix and distribution of effort which was estimated by the government or proposed by the Contractor.

(j) Nothing herein shall be construed to alter or waive any of the rights or obligations of either party pursuant to the Clause entitled "Limitation of Costs" or "Limitation of Funds," either of which clauses as incorporated herein applies to this contract.

(k) The anticipated breakdown by labor category of the total level of effort is as follows:

<u>Labor Category</u>	<u>Hours *</u>
Principal Research Scientist/Engineer	4,000
Senior Research Scientist/Engineer	500
Research Scientist/Engineer	9,000
Master Engineer	9,000
Technician	9,000
Office Automation Assistant	4,000

**Please note the above total level of effort is based on all four options being exercised. The anticipated breakdown by labor category of the level of effort is set forth on Page 6 of Attachment (1).*

H-4 ONR 5252.235-9714 - REPORT PREPARATION (FEB 02)

Scientific or technical reports prepared by the Contractor and deliverable under the terms of this contract will be prepared in accordance with format requirements contained in ANSI/NISO Z39.18-1995, Scientific and Technical Reports: Elements, Organization, and Design.

[NOTE: All NISO American National Standards are available as free, downloadable pdf(s) at <http://www.niso.org/standards/index.html> . NISO standards can also be purchased in hardcopy form from NISO Press Fulfillment, P. O. Box 451, Annapolis Junction, MD 20701-0451 USA. Telephone U.S. and Canada: (877) 736-6476; Outside the U.S. and Canada: 301-362-6904 ax: 301-206-9789.]

H-5 ELECTRONIC AND INFORMATION TECHNOLOGY (EIT)

In accordance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), all EIT supplies and services provided under this contract must comply with the applicable accessibility standards issued by the Architectural and Transportation Barriers Compliance Board at 36 CFR part 1194 (see FAR Subpart 39.2). Electronic and information technology (EIT) is defined at FAR 2.101.

H-6 OPTION TO EXTEND THE TERM OF THE CONTRACT

This contract shall be renewable at the unilateral option of the Government by the Contracting Officer giving written notice of renewal to the Contractor within the existing term of the contract. The Government may exercise its option to renew the contract a total of four (4) times and each such renewal shall extend the term of the contract by twelve (12) months. The Contractor agrees that performance under each such renewal shall be accomplished in accordance with all of the terms and conditions of this contract and at the estimated cost and fixed fee set forth below:

First Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Second Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Third Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

Fourth Option

Estimated Cost:	\$
Fixed Fee:	\$
Estimated Cost Plus Fixed Fee:	\$

H-7 ON-SITE USE OF GOVERNMENT PROPERTY

It is anticipated that Government property will be used by the contractor's personnel in the performance of that portion of the contract performed on-site at the U.S. Naval Research Laboratory (NRL) including any of its field sites. Such use will be on a rent free basis and all such property shall be considered to remain in the possession and control of the NRL for property responsibility and accountability purposes.

H-8 REPRESENTATIONS AND CERTIFICATIONS

The Contractor's completed Representations, Certifications, and Other Statements of Offerors or Respondents is incorporated herein by reference in any resultant award.

PART II - CONTRACT CLAUSES
SECTION I
CONTRACT CLAUSES

I-1 52.252-2 - CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>
<http://heron.nrl.navy.mil/contracts/home.htm>

a. FEDERAL ACQUISITION REGULATION CLAUSES

FAR CLAUSE	TITLE
52.202-1	- Definitions (DEC 2001)
52.203-3	- Gratuities (APR 1984)
52.203-5	- Covenant Against Contingent Fees (APR 1984)
52.203-6	- Restrictions On Subcontractor Sales To The Government (JUL 1995)
52.203-7	- Anti-Kickback Procedures (JUL 1995)
52.203-8	- Cancellation, Rescission, And Recovery Of Funds For Illegal Or Improper Activity (JAN 1997)
52.203-10	- Price Or Fee Adjustment For Illegal Or Improper Activity (JAN 1997)
52.203-12	- Limitation On Payments To Influence Certain Federal Transactions (JUN 1997)
52.204-2	- Security Requirements (AUG 1996)
52.204-4	- Printed Or Copied Double-Sided On Recycled Paper (AUG 2000)
52.209-6	- Protecting The Government's Interest When Subcontracting With Contractors Debarred, Suspended, Or Proposed For Debarment (JUL 1995)
52.211-15	- Defense Priority And Allocation Requirements (SEP 1990)
52.215-2	- Audit And Records-Negotiation (JUN 1999)
52.215-8	- Order Of Precedence - Uniform Contract Format (OCT 1997)
52.215-10	- Price Reduction For Defective Cost Or Pricing Data (OCT 1997)
52.215-11	- Price Reduction For Defective Cost Or Pricing Data - Modifications (OCT 1997)
52.215-12	- Subcontractor Cost Or Pricing Data (OCT 1997)
52.215-13	- Subcontractor Cost Or Pricing Data Modifications (OCT 1997)
52.215-14	- Integrity Of Unit Prices (OCT 1997)
52.215-15	- Pension Adjustments And Asset Reversions (DEC 1998)
52.215-17	- Waiver Of Facilities Capital Cost Of Money (OCT 1997) (<i>will be included if the successful offeror does not propose facilities capital cost of money</i>)
52.215-18	- Reversion Or Adjustment Of Plans For Post-Retirement Benefits (PRB) Other Than Pensions (OCT 1997)
52.215-19	- Notification Of Ownership Changes (OCT 1997)
52.215-21	- Requirements For Cost And Pricing Data Or Information Other Than Cost Or Pricing Data - Modifications (OCT 1997) - Alternate IV (OCT 1997) (a) Submission of cost or pricing data is not required. (b) Provide information described below: (See L-10, INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS)
52.216-7	- Allowable Cost And Payment (FEB 2002) (<i>If the contract is with an educational institution, modify the clause by deleting from paragraph (a) "Subpart 31.2" and substitute "Subpart 31.3". If the contract is with a state or local government, delete from paragraph (a) "Subpart 31.2" and substitute "Subpart 31.6". If the contract is with a nonprofit other than an educational institution, a state or local government, or a nonprofit organization exempted under OMB Circular A-122, modify the clause by deleting from paragraph (a) "Subpart 31.2" and substituting "Subpart 31.7".</i>)
52.216-8	- Fixed-Fee (MAR 1997)
52.219-4	- Notice Of Price Evaluation Preference For HUBZone Small Business Concerns (JAN 1999) <input type="checkbox"/> Offeror elects to waive the evaluation preference.
52.219-6	- Notice Of Total Small-Business Set-Aside (JUL 1996)

- 52.219-6 - Notice Of Total Small-Business Set-Aside (JUL 1996) - Alternate I (OCT 1995)
- 52.219-8 - Utilization Of Small Business Concerns (OCT 2000)
- 52.219-14 - Limitations On Subcontracting (DEC 1996)
- 52.222-2 - Payment For Overtime Premiums (JUL 1990) -The Use Of Overtime Is Authorized Under This Contract If The Overtime Premium Does Not Exceed "0"
- 52.222-3 - Convict Labor (AUG 1996)
- 52.222-19 - Child Labor – Cooperation With Authorities And Remedies (DEC 2001)
- 52.222-21 - Prohibition Of Segregated Facilities (FEB 1999)
- 52.222-26 - Equal Opportunity (APR 2002)
- 52.222-29 - Notification Of Visa Denial (FEB 1999)
- 52.222-35 - Equal Opportunity For Special Disabled Veterans, Veterans Of The Vietnam Era, And Other Eligible Veterans (DEC 2001)
- 52.222-36 - Affirmative Action For Workers With Disabilities (JUN 1998)
- 52.222-37 - Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, And Other Eligible Veterans (DEC 2001)
- 52.223-3 - Hazardous Material Identification And Material Safety Data (JAN 1997)
- 52.223-5 - Pollution Prevention And Right-To-Know Information (APR 1998)
- 52.223-6 - Drug-Free Workplace (MAY 2001)
- 52.223-14 - Toxic Chemical Release Reporting (OCT 2000)
- 52.225-13 - Restrictions On Certain Foreign Purchases (JUL 2000)
- 52.227-1 - Authorization And Consent (JUL 1995)- Alternate I (APR 1984)
- 52.227-2 - Notice And Assistance Regarding Patent And Copyright Infringement (AUG 1996)
- 52.227-10 - Filing Of Patent Application- Classified Subject Matter (APR 1984)
- 52.227-11 - Patent Rights - Retention By The Contractor (Short Form) (JUN 1997)
(*will be included if the successful offeror is a small business or a non-profit organization*)
- 52.228-7 - Insurance - Liability To Third Persons (MAR 1996)
- 52.230-3 - Disclosure And Consistency Of Cost Accounting Practices (APR 1998)
- 52.232-9 - Limitation On Withholding Of Payments (APR 1984)
- 52.232-17 - Interest (JUN 1996)
- 52.232-20 - Limitation Of Cost (APR 1984) (*Applicable when the contract or task order is fully funded*)
- 52.232-22 - Limitation Of Funds (APR 1984) (*Applicable when the contract or task order is not fully funded*)
- 52.232-23 - Assignment Of Claims (JAN 1986) Alternate I (APR 1984)
- 52.232-25 - Prompt Payment (FEB 2002) Alternate I (FEB 2002)
- 52.232-33 - Payment By Electronic Funds Transfer-Central Contractor Registration (MAY 1999)
- 52.233-1 - Disputes (DEC 1998)
- 52.233-3 - Protest After Award (AUG 1996) - Alternate I (JUN 1985)
- 52.237-2 - Protection Of Government Buildings, Equipment And Vegetation (APR 1984)
- 52.242-1 - Notice Of Intent To Disallow Costs (APR 1984)
- 52.242-3 - Penalties For Unallowable Costs (MAY 2001)
- 52.242-4 - Certification of Final Indirect Costs (JAN 1997)
- 52.242-13 - Bankruptcy (JUL 1995)
- 52.243-2 - Changes - Cost-Reimbursement (AUG 1987) - Alternate I (APR 1984)
- 52.244-2 - Subcontracts (AUG 1998) - Alternate I (AUG 1998)
- 52.244-5 - Competition In Subcontracting (DEC 1996)

- 52.244-6 - Subcontracts For Commercial Items (MAY 2002)
- 52.245-5 - Government Property (Cost-Reimbursement, Time-And-Material, Or Labor-Hour Contracts) (JAN 1986) (DEVIATION)
- 52.245-18 - Special Test Equipment (FEB 1993)
- 52.246-23 - Limitation Of Liability (FEB 1997)
- 52.246-25 - Limitation Of Liability - Services (FEB 1997)
- 52.247-1 - Commercial Bill Of Lading Notations (APR 1984)
- 52.247-63 - Preference For U. S. Flag Carriers (JAN 1997)
- 52.249-6 - Termination (Cost-Reimbursement) (SEP 1996)
- 52.249-14 - Excusable Delays (APR 1984)
- 52.251-1 - Government Supply Sources (APR 1984)
- 52.252-6 - Authorized Deviations in Clauses (APR 1984)(fill in Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2))
- 52.253-1 - Computer Generated Forms (JAN 1991)

b. DEPARTMENT OF DEFENSE FEDERAL ACQUISITION REGULATION CLAUSES

DFARS CLAUSE TITLE

- 252.201-7000 - Contracting Officer's Representative (DEC 1991)
- 252.203-7001 - Prohibition On Persons Convicted Of Fraud Or Other Defense Contract Related Felonies (MAR 1999)
- 252.204-7000 - Disclosure Of Information (DEC 1991)
- 252.204-7003 - Control Of Government Personnel Work Product (APR 1992)
- 252.204-7004 - Required Central Contractor Registration (NOV 2001)
- 252.204-7005 - Oral Attestation Of Security Responsibilities (NOV 2001)
- 252.205-7000 - Provision Of Information To Cooperative Agreement Holders (DEC 1991)
- 252.209-7000 - Acquisition From Subcontractors Subject To On-Site Inspection Under The Intermediate-Range Nuclear Forces (INF) Treaty (NOV 1995)
- 252.209-7004 - Subcontracting With Firms That Are Owned Or Controlled By The Government Of A Terrorist Country (MAR 1998)
- 252.215-7000 - Pricing Adjustments (DEC 1991)
- 252.215-7002 - Cost Estimating System Requirements (OCT 1998)
- 252.223-7001 - Hazard Warning Labels (DEC 1991)
- 252.223-7004 - Drug-Free Work Force (SEP 1988)
- 252.223-7006 - Prohibition On Storage And Disposal Of Toxic And Hazardous Materials (APR 1993)
- 252.225-7001 - Buy American Act And Balance Of Payments Program (MAR 1998)
- 252.225-7002 - Qualifying Country Sources As Subcontractors (DEC 1991)
- 252.225-7009 - Duty-Free Entry – Qualifying Country Supplies (End Products and Components (AUG 2000)
- 252.225-7012 - Preference For Certain Domestic Commodities (AUG 2000)
- 252.225-7026 - Reporting Of Contract Performance Outside The United States (JUN 2000)
- 252.225-7031 - Secondary Arab Boycott Of Israel (JUN 1992)
- 252.225-7043 - Antiterrorism/Force Protection Policy For Defense Contractors Outside The United States (JUN 1998) (fill in : Naval Criminal Investigative Service (NCIS), Code 24, telephone, DSN 228-9113 or commercial (202)433-9113)
- 252.226-7001 - Utilization of Indian Organizations and Indian-Owned Economic Enterprises-DoD

- Contracts (SEP 2001)
- 252.227-7000 - Non Estoppel (OCT 1966)
- 252.227-7001 - Release Of Past Infringement (AUG 1984)
- 252.227-7013 - Rights In Technical Data -- Noncommercial Items (NOV 1995)
- 252.227-7014 - Rights In Noncommercial Computer Software And Noncommercial Computer Software Documentation (JUN 1995)
- 252.227-7016 - Rights In Bid Or Proposal Information (JUN 1995)
- 252.227-7019 - Validation Of Asserted Restrictions--Computer Software (JUN 1995)
- 252.227-7030 - Technical Data--Withholding Of Payment (MAR 2000)
- 252.227-7034 - Patents--Subcontracts (APR 1984)
- 252.227-7036 - Declaration Of Technical Data Conformity (JAN 1997)
- 252.227-7037 - Validation Of Restrictive Markings On Technical Data (SEP 1999)
- 252.227-7039 - Patents--Reporting Of Subject Inventions (APR 1990)
- 252.231-7000 - Supplemental Cost Principles (DEC 1991)
- 252.235-7010 - Acknowledgment Of Support And Disclaimer (MAY 1995)
- 252.235-7011 - Final Scientific Or Technical Report (SEP 1999)
- 252.242-7000 - Post Award Conference (DEC 1991)
- 252.243-7002 - Requests For Equitable Adjustment (MAR 1998)
- 252.244-7000 - Subcontracts For Commercial Items And Commercial Components (DOD Contracts) (MAR 2000)
- 252.245-7001 - Reports Of Government Property (MAY 1994)
- 252.246-7001 - Warranty Of Data (DEC 1991)
- 252.247-7023 - Transportation Of Supplies By Sea (MAR 2000)
- 252.247-7024 - Notification Of Transportation Of Supplies By Sea (MAR 2000)
(will be included if the successful offeror made a negative response to the inquiry at DFARS 252.247-7022)
- 252.251-7000 - Ordering From Government Supply Sources (MAY 1995)

I-2 FAR 52.223-11 - OZONE-DEPLETING SUBSTANCES (MAY 2001)

(a) *Definitions.* "Ozone-depleting substance", as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as –

- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
- (2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

WARNING

Contains (or manufactured with, if applicable) _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

*The Contractor shall insert the name of the substance(s).

I-3 DFARS 252.225-7008 - SUPPLIES TO BE ACCORDED DUTY- FREE ENTRY (MAR 1998)

In accordance with paragraph (b) of the Duty-Free Entry clause of this contract, in addition to duty-free entry for all qualifying country supplies (end products and components) and all eligible end products subject to applicable trade agreements (if this contract contains the Buy American Act - Trade Agreements - Balance of Payments Program clause or the Buy American Act - North American Free Trade Agreement Implementation Act - Balance of Payments Program clause), the following foreign end products that are neither qualifying country end products nor eligible end products under a trade agreement, and the following nonqualifying country components, are accorded duty free entry.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**SECTION J****LIST OF ATTACHMENTS**

- J-1** Attachment (1) - Statement Of Work - 6 Pages, With Exhibit A - DD Form 1423, Contract Data Requirements List, 3 Pages.
- J-2** Attachment (2) – Personnel Qualifications, 2 Pages.
- J-3** Attachment (3) – Accounting and Appropriation Data- 1 page. *
- (* To be included at time of award)

PART IV - REPRESENTATIONS AND INSTRUCTIONS**SECTION - K****REPRESENTATIONS, CERTIFICATIONS
AND OTHER STATEMENTS OF OFFERORS OR RESPONDENTS****K-1 Representations, Certifications, and Other Statements of Offerors or Respondents**

Each Offeror must submit a completed Representations, Certifications, and Other Statements Of Offerors or Respondents with its proposal which is available electronically in full text at <http://heron.nrl.navy.mil/contracts/rep&certs.htm>

Use Representations and Certifications: A

K-2 FILL IN FOR FAR 52.219-1 - SMALL BUSINESS PROGRAM REPRESENTATIONS (MAR 2001)

The fill in information is as follows:

The NAICS code for this acquisition is 541710.

The small business size standard is 500.

**SECTION L
INSTRUCTIONS CONDITIONS AND NOTICES
TO OFFERORS OR RESPONDENTS**

L-1 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>
<http://heron.nrl.navy.mil/contracts/home.htm>

FAR CLAUSE	TITLE
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52.204-6	- Data Universal Numbering System (DUNS) Number (JUNE 1999)
52.211-2	- Availability Of Specifications Listed In The DOD Index Of Specifications And Standards (DoDISS) And Descriptions Listed In The Acquisition Management Systems And Data Requirements Control List, DoD 5010.12-L (DEC 1999)
52.214-34	- Submission Of Offers In The English Language (APR 1991)
52.214-35	- Submission Of Offers In U.S. Currency (APR 1991)
52.215-1	- Instructions To Offerors- Competitive Acquisition (MAY 2001)
52.215-16	- Facilities Capital Cost Of Money (OCT 1997)
52.219-24	- Small Disadvantaged Business Participation Program - Targets (OCT 2000)

L-2 FAR 52.211-14 - NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (SEP 1990)

Any contract awarded as a result of this solicitation will be a ☐ DX rated order; ☒ DO rated order certified for national use under the Defense Priorities and Allocations system (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation.

L-3 FAR 52.215-20 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (OCT 1997)ALTERNATE IV (OCT 1997)

(a) Submission of cost or pricing data is not required.

- (b) Provide information described below **“See L-12, Volume II – Business Proposal”**

L-4 FAR 52.216-1 - TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Cost Plus Fixed Fee Term contract resulting from this solicitation.

L-5 FAR 52.233-2 - SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the Control Desk, Code 3200, Bldg. 222, Rm. 115, Naval Research Laboratory, 4555 Overlook Ave., S.W., Washington DC 20375-5326.

- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

L-6 DFARS 252.227-7017 - IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS (JUN 1995)

- (a) The terms used in this provision are defined in following clause or clauses contained in this solicitation—

- (1) If a successful offeror will be required to deliver technical data, the Rights in Technical Data--Noncommercial Items clause, or, if this solicitation contemplates a contract under the Small Business Innovative Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovative Research (SBIR) Program clause.

- (2) If a successful offeror will not be required to deliver technical data, the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause, or, if this solicitation contemplates a contract under the Small Business Innovative Research Program, the Rights in Noncommercial Technical Data and Computer Software--Small Business Innovative Research (SBIR) Program clause.
- (b) The identification and assertion requirements in this provision apply only to technical data, including computer software documents, or computer software to be delivered with other than unlimited rights. For contracts to be awarded under the Small Business Innovative Research Program, the notification requirements do not apply to technical data or computer software that will be generated under the resulting contract. Notification and identification is not required for restrictions based solely on copyright.
- (c) Offers submitted in response to this solicitation shall identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Offeror, its subcontractors or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure.
- (d) The Offeror's assertions, including the assertions of its subcontractors or suppliers or potential subcontractors or suppliers shall be submitted as an attachment to its offer in the following format, dated and signed by an official authorized to contractually obligate the Offeror:

Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of
Technical Data or Computer Software.

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions****
(List)*****	(List)	(List)	(List)

* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such items, component, or process. For computer software or computer software documentation identify the software or documentation.

** Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

- *** Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).
- **** Corporation, individual, or other person, as appropriate.
- ***** Enter "none" when all data or software will be submitted without restrictions.

Date _____

Printed Name and Title _____

Signature _____

(End of identification and assertion)

- (e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.
- (f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

L-7 DFARS 252.227-7028 - TECHNICAL DATA OR COMPUTER SOFTWARE PREVIOUSLY DELIVERED TO THE GOVERNMENT (JUN 1995)

The Offeror shall attach to its offer an identification of all documents or other media incorporating technical data or computer software it intends to deliver under this contract with other than unlimited rights that are identical or substantially similar to documents or other media that the Offeror has produced for, delivered to, or is obligated to deliver to the Government under any contract or subcontract. The attachment shall identify - -

- (a) The contract number under which the data or software were produced;
- (b) The contract number under which, and the name and address of the organization to whom, the data or software were most recently delivered or will be delivered; and
- (c) Any limitations on the Government's rights to use or disclose the data or software, including, when applicable, identification of the earliest date the limitations expire.

L-8 GOVERNMENT-FURNISHED PROPERTY

No material, labor, or facilities will be furnished by the Government unless provided for in the solicitation.

L-9 INQUIRIES CONCERNING THE RFP

Any questions concerning the RFP must be submitted in writing to the Contracting Officer at the location noted in blocks 7 and 9 of the Standard Form 33, "Solicitation, Offer and Award," no less than fifteen (15) days before closing. The Government will not consider questions received after this date. Offerors are cautioned against directing any questions concerning this RFP to technical personnel at the Naval Research Laboratory.

L-10 INSTRUCTIONS FOR SUBMISSION AND INFORMATION REQUIRED TO EVALUATE PROPOSALS

- (1) Information for the technical/management proposal shall be placed in Volume I and be completely separate from the business proposal (Volume II).
- (2) Proposal Identification/Mailing - The proposal should be packaged for delivery so as to permit safe and timely arrival at destination. The proposal package should be sent to the address shown in Block 7 of the RFP face page and marked:

Solicitation No. N00173-02-R-MM03

Closing Date:

(As specified in Block 9, RFP face page)

Attn: Code 3230.MM

- (3) Proposal Format and Length - No attempt is made to restrict the proposal format and style. However, the proposal should be written and organized so as to be compatible with the RFP, the Statement of Work, company's organization and accounting structure, and proposed cost estimate. Offerors are encouraged to use recycled paper and maximize the use of double sided copying when preparing responses to solicitations.

L-11 VOLUME I - TECHNICAL/MANAGEMENT PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 2 COPIES .

- (1) Include a matrix indicating proposed labor hours by skill category required to perform the statement of work. This matrix shall not contain labor rates or any other indication of price.
- (2) The following information is required for evaluation of your technical/management :

TECHNICAL FACTOR (1): Qualifications of Personnel

The offer shall provide convincing proof that the offeror has, or has the ability to obtain, personnel with relevant experience in the scientific and technical areas described in the statement of work. These are highly specialized fields and personnel without actual experience in these areas are not acceptable. The proposal should indicate the specific personnel to be assigned to this project, their backgrounds and pertinent experience and the length of time each will be working on this project under each of the categories outlined in the RFP. This will include education level, experience, both general and project related, and the availability of these key project professional personnel, including any proposed subcontractors and/or consultants, to this project. Offers must demonstrate qualifications in the areas described in the Statement of Work.

TECHNICAL FACTOR (2): Technical Approach

The proposal should provide the means for developing designs, identifying suppliers or manufacturers, and obtaining cost estimates for experimental hardware. The proposal should also provide means for oversight of quality, cost and timeliness for both smaller tasks requiring a rapid response, and tasks involving complex design, fabrication, and installation of major laboratory equipment. In addition, the proposal should provide demonstrated company experience in maintaining accurate costs on similar tasks.

TECHNICAL FACTOR (3): Company Experience

The proposal must provide a narrative description of the company experience on providing research and associated support similar to the requirements in the Statement of Work. The company must have demonstrated the capacity to routinely and rapidly respond to the design engineering, fabrication and installation requirements of a research laboratory. Typical requirements will include design fabrication, procurement of sub-components, and assembly of small and medium sized pieces of laboratory hardware. This description should clearly show: (1) the relationship between the company's experience and the requirements under the Statement of Work and (2) prior similar or current programs. The company must also have demonstrated capability to manage the design, fabrication, and installation of large, expensive (>\$100,000.00) components engineered for research applications. Examples from within the previous five (5) years must be provided. Prior experience should be identified by citing contracting agency, period of performance of the contract, a summary of the nature of the work. References must be provided for the prime contractor and proposed subcontractors.

TECHNICAL FACTOR (4): Past Performance

(a) Offerors shall submit the following information as part of their proposal. (*Offerors are encouraged to submit the information prior to other parts of the proposal to assist the government in reducing the length of the evaluation period.*) List the last five (5) contracts or subcontracts completed by the offeror or predecessor companies during the past three (3) years for services similar in nature to this requirement. Include in the five (5) any current contracts or subcontracts for similar services that were awarded at least one year prior to the date of this solicitation. Offerors that have no similar previous or current contracts should provide the requested information for proposed subcontractors that will perform major or critical aspects of the requirement or for the proposed project manager or key personnel responsible for major or critical aspects of the requirement.

1. Name of contracting organization.
2. Contract number
3. Contract type
4. Total contract value
5. Description of the contract work
6. Contracting officer and telephone number
7. Contracting officer's representative, program manager, or similar official and telephone number

(b) Offerors shall contact the contracting organizations identified pursuant to paragraph (a) as soon as possible and request them to send past performance information on the identified contracts to the address in Block 7 of the face page of this solicitation. The past performance report which is available

electronically in full text at <http://heron.nrl.navy.mil/contracts/home.htm> is to be provided to the contracting organization for this purpose. If the contracting organization has already collected past performance information on the contract pursuant to FAR Subpart 42.15, the format used to collect the information may be used instead of the past performance report.

(c) Offerors may include in their proposals specific information relating to problems encountered in performing the identified contracts and any corrective actions by the offeror. Offerors should not provide general information on their performance on the identified contracts as this will be obtained from the contracting organizations.

L-12 VOLUME II - BUSINESS PROPOSAL

REQUIRED COPIES: 1 ORIGINAL AND 2 COPIES

(1) COST PROPOSAL

- (a) The offeror shall submit a business proposal that includes a cost proposal with supporting information for each cost element consistent with offeror's cost accounting system. The supporting breakdown should include such elements as materials, direct labor, indirect cost, and other costs such as travel. The offeror shall provide exhibits as necessary to substantiate each cost element. Should rates be used in the proposal which are not DCAA approved, the offeror shall provide complete documentation and the rationale for their use at time of proposal submission. However, offerors are advised to use actual labor rates of proposed personnel as the basis for estimating labor costs when practicable.
- (b) It is requested that offerors provide one (1) copy of their cost proposal on a PC formatted disk or CD Rom using software that is compatible with Microsoft Excel Version 5.
- (c) The following travel and material estimates are for evaluation purposes only. The government estimates the travel and materials cost for this effort to be as shown in the matrix below:

	Base Term	Option 1	Option 2	Option 3	Option 4
Materials	\$ 7,000	\$ 7,000	\$ 7,000	\$ 7,000	\$ 7,000
Travel	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000

Please note that all offers will be evaluated using the estimated amounts provided above plus applicable indirect costs.

SECTION M EVALUATION FACTORS FOR AWARD

M-1 EVALUATION

Award will be made to that offeror whose proposal is determined to be the best value to the Government, proposed cost and other factors considered. The Government reserves the right to make award to other

than the low offeror. Although technical considerations are more important than the cost factor, the closer the technical scores of the various proposals are to one another, the more important the business considerations become.

M-2 EVALUATION FACTORS FOR AWARD

Proposals will be evaluated in accordance with the following criteria. The evaluation subfactors are in descending order of importance.

M-2-1. TECHNICAL/MANAGEMENT

(1) PERSONNEL QUALIFICATIONS

The proposal shall be evaluated on the specific personnel to be assigned to this project, their backgrounds and pertinent experience and the length of time each will be working on this project. This will include education level, experience, both general and project related, and the availability of these key project professional personnel, including any proposed subcontractors and /or consultants, to the project. Offerors must demonstrate qualification in the areas described in the Statement of Work.

(2) RESEARCH APPROACH

The proposal should describe in detail the proposed response to tasks from sections 3.1 – 3.6. The proposal should demonstrate a sound understanding of the objectives of the required work and the physics and engineering issues involved in carrying out this work. Proposals will be evaluated on their uniqueness, completeness, clarity, and feasibility of the technical approach and whether the approach should lead to a successful completion of the project goals in the allotted time.

(3) COMPANY EXPERIENCE

The company must also be able to cite past theoretical and experimental research accomplishments pertaining to the technical areas described in tasks 3.1 - 3.6. The proposal should demonstrate the contractor's capacity to routinely and rapidly respond to the design engineering, fabrication, installation, and experimental operations requirements of a research laboratory. Examples from within the previous 3 years must be provided.

(4) PAST PERFORMANCE

Past performance will be evaluated on the basis of the quality of the work performed, timeliness of performance, cost control, and business relations. The evaluation will be based on the information provided pursuant to Section L and other sources if available. The evaluation will take into account past performance information regarding predecessor companies, subcontractors that will perform major or critical aspects of the requirement, or the proposed project manager or key personnel responsible for major or critical aspects of the requirement. Offerors that have no relevant performance history or for which past performance information is not available will not be evaluated favorably or unfavorably on past performance. The government may begin proposal evaluation prior to receipt of past performance information. If, after completion of proposal evaluation except evaluation of past performance, the contracting officer determines that evaluation of past performance will not affect the outcome of competitive selection, the contracting officer may waive its evaluation in accordance with FAR 15.304(c)(3)(iv).

M-2-2 COST TO THE GOVERNMENT

Proposed estimated cost to the Government. The Government may adjust the proposed cost for purposes of evaluation based upon an evaluation of cost realism. Cost Realism means that the costs in an offeror's proposal are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the various elements of the offeror's technical proposal. The cost realism evaluation includes an analysis of the adequacy of the hours, labor mix, and other direct costs to perform the work as proposed in the technical proposal as well as the proposed labor and indirect rates. It also includes evaluation of the likelihood that the risks inherent in the offeror's technical approach will result in higher actual costs than anticipated.

M-3 FAR 52.217-5 - EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

**STATEMENT OF WORK
FOR
RESEARCH SUPPORT FOR PHYSICS AND APPLICATIONS OF HIGH
POWER LASER AND MICROWAVE SOURCES**

1.0 BACKGROUND

1.1 Introduction

The Beam Physics Branch of the Plasma Physics Division at the Naval Research Laboratory carries out basic and applied research on high power laser and microwave radiation sources. The Branch uses and develops a wide variety of theoretical, numerical and experimental techniques. Specific research areas include intense short pulse laser physics, laser propagation in gases and plasmas, pulsed laser applications, and high power microwave source development and applications. For many years, this Branch has developed many new concepts with contractor support.

The Branch maintains several major experimental facilities and a number of smaller scale experiments. Much of the theoretical and computational research supports these experiments. The three major laser sources are the table top terawatt (T^3) laser, the ten hertz femtosecond (THF) laser and the PHAROS laser. The T^3 laser produces a 400 fsec long pulse at 1.06 micrometer wavelength with approximately 8 J of energy. This device is currently being used for basic physics studies on laser propagation and laser-matter interactions. T^3 experiments in progress are also investigating potential applications such as laser wakefield accelerators, all-optical electron beam injectors, and novel x-ray sources based on nonlinear Thompson scattering. The THF laser currently produces a train of 100 fsec, 25 mJ, 0.8 μm pulses at a pulse repetition rate of 1- Hz, and will primarily be used to study laser propagation in gases and plasmas. The PHAROS laser has a much longer pulse length (several nsec) and a much higher pulse energy of ~1 kJ per pulse. It is used for plasma x-ray sources and shock physics studies. The Branch also has a 4.5 MeV rf electron gun used for laser-driven accelerator and laser synchrotron x-ray source studies. Lasers are also used in a variety of smaller scale experiments. Microwave experiments are carried out in a separate facility that includes a high frequency (83 GHz) gyrotron with 15 kW of average power, a high power X-band magnicon, and several lower power sources. The magnicon is primarily intended as a source for advanced accelerator applications and

currently is being used in active pulse compression and dielectrically-loaded waveguide experiments. The other sources are primarily used for materials sintering and joining research.

2.0 SCOPE

The purpose of this Request for Proposal (RFP) and Statement of Work (SOW) is to acquire the necessary personnel, equipment and facilities to perform detailed research in the areas described above using analytical, numerical and experimental techniques in computer hardware to study the various problem areas.

3.0 TECHNICAL REQUIREMENTS

In order to carry out this research in a timely and costly effective manner, the Branch requires primarily on-site personnel. The contractor shall carry out analytical, numerical and experimental work in response to the requirements of the Branch. Specifically, the contractor shall perform technical work in the following task areas.

3.1 Ultra-intense Short Pulse Laser Physics

The Branch has a substantial theoretical and experimental effort to study the generation and sub-picosecond laser pulses and their interaction with matter. Much of this work involves the physics of laser propagation in gases and plasmas. Key physics issues include laser-generated ionization, refractive focusing or guiding, self-phase modulation, Raman instabilities, and spectral broadening. Optical guiding of very intense pulses using plasma channels produced by capillary discharges is of particular interest. The contractor shall provide support for experiments utilizing the T³ and THF ultr-short pulse intense lasers, including the design and operation of the experiments and the acquisition and analysis of data. In addition, the contractor shall assist with routine maintenance of the existing laser and support systems as well as any new systems or upgrades.

3.2 Pulsed Laser Propagation in the Atmosphere

The Branch has initiated a major new effort to study propagation of laser pulses in the atmosphere. The physics involves many of the processes cited in Task 3.1, but the laser intensity is substantially lower so that the laser generated plasma density is usually much smaller than the neutral gas density. Spectral broadening and chirped pulsed compression are

topics of particular interest. The contractor shall provide support for atmospheric propagation experiments, including the design and operation of the experiments and the acquisition and analysis of data. The contractor shall also assist in developing and deploying new diagnostics for propagation experiments as well as any new laser systems or upgrades used for atmospheric propagation experiments.

3.3 Applications of Short Pulse Lasers

Ultra-intense short pulse lasers are being developed for a variety of applications, including laser wakefield accelerators, all-optical electron beam injectors, plasma-based optical elements, and novel x-ray sources. Many of the intense laser physics experiments are designed with the requirements for these applications specifically in mind. The atmospheric propagation experiments are motivated in part by a number of potential applications including remote sensing, countermeasures, sensor damage, and laser-induced electric discharges. Of particular interest is remote detection of chemical and biological agents and the generation of localized radiation sources at long ranges. The contractor shall assist in the planning, execution, and analysis of experiments on specific applications of short pulse lasers. In addition, the contractor shall provide assessments of potential applications of ultra-intense pulses lasers and pulsed lasers propagating in the atmosphere.

3.4 High Power Microwave Sources

The Branch has developed several microwave sources with high peak and/or average power. For example, a magnicon source has been developed that provides high peak power radiation at a frequency of 11.4 GHz. In addition, an 83 GHz gyrotron is now operational and has produced an average power exceeding 10 KW. The contractor shall provide experimental support for the development and operation of these sources, including ancillary control and diagnostics systems.

3.5 Applications of High Power Microwave and Particle Beam Sources

High power microwave sources are being considered for a variety of applications, including materials processing, advanced accelerators, remote sensing, and power beaming. The radiation from the 83 GHz gyrotron can be focused directly onto a workpiece, producing very rapid, localized, selective heating. This makes the sources suitable for materials applications, including bonding, delamination, and surface processing application as well as bulk sintering. The magnicon source is primarily

intended for high energy accelerator applications and is currently being used for experiments on active pulse compression and electron acceleration in a dielectric-loaded waveguide. The Branch is also investigating other microwave applications, including power beaming, remote sensing of clouds, and remote detection of explosives. In addition, the Branch is interested in applications of high energy particle beams, including electron-beam-driven laser synchrotron (LSS) and free electron laser (FEL) sources. The contractor shall provide assistance in the planning, execution, and analysis of ongoing materials processing experiments and magnicon-driven accelerator experiments. In addition, the contractor may be called upon to assess the feasibility of other applications of high power microwave or particle beam sources.

3.6 Office Automation Support

The Branch has an ongoing requirement for additional support in the area of office automation and administration. This includes preparation of technical and administrative documents in a variety of formats including transfer of documents to the Division web server. The performance of routine administrative tasks may also be required.

4.0 OTHER CONTRACTOR REQUIREMENTS

4.1 Personnel

All contractor personnel must be qualified in their particular labor category and the government reserves the right to review qualifications over the life of the contract. The technical personnel will be located at the Naval Research Laboratory. They will be expected to travel to off-site locations for short periods to meet sponsor-mandated requirements or to report on their results.

4.2 Deliverables

The contractor shall provide all designs, blueprints, and computer codes developed by the contractor under this contract to NRL along with appropriate documentation to use in the numerical modeling, for unrestricted use and further development by NRL. Other contractor proprietary codes may be purchased by NRL on a site license basis. Results of research shall be documented in written reports and supplied within a reasonable time of the completion of any given task to the government. Interim oral reports will be supplied when requested by the (Reference: DD Form 1423)

4.3 Contractor-Furnished Materials, Subcontracts, Equipment, and Supplies

The contractor shall provide any other material, subcontracts, equipment, and supplies not furnished by the government but required to perform the work assigned under the contract. As is necessary for performance under this contract, the contractor shall provide materials (or subcontracts) necessary for performing the numerical or experimental studies. In particular, these may include materials or small equipment required to perform the experimental portion of the task areas as well as computer hardware and software. The above are not all-inclusive and binding, but are representative of the type of materials that are anticipated for performance of this contract. The contractor shall provide supplies for contractor personnel. Equipment and unexpected materials and supplies purchased by the contractor under this contract shall become the property of the government at the end of the performance period.

DESIRED LEVEL OF EFFORT

<u>LABOR CATEGORY</u>	<u>BASE YEAR</u>	<u>OPTION I</u>	<u>OPTION II</u>	<u>OPTION III</u>	<u>OPTION IV</u>
Principal Research Scientist/Engineer*	800	800	800	800	800
Senior Research Scientist/Engineer*	100	100	100	100	100
Research Scientist/Engineer	1800	1800	1800	1800	1800
Master Engineer*	1800	1800	1800	1800	1800
Technician	1800	1800	1800	1800	1800
Office Automation Assistant	800	800	800	800	800
Total Hours Per Year (*Key Personnel)	7100	7100	7100	7100	7100
Materials (k\$)	10	10	10	10	10
Travel (k\$)	7	7	7	7	7

(1 Data Item)

OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. 0002		B. EXHIBIT A	C. CATEGORY: TDP _____ TM _____ OTHER _____ F				
D. SYSTEM / ITEM		E. CONTRACT / PR NO. N00173-02-R-MM03		F. CONTRACTOR			
1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Contractor On-Site Labor, Travel and Material Report			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) N/A		5. CONTRACT REFERENCE See SOW Section 3.0 - 4.0		6. REQUIRING OFFICE NRL CODE			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED N/A	10. FREQUENCY MNTLY	12. DATE OF FIRST SUBMISSION 30 DAC	14. DISTRIBUTION			
8. APP CODE N/A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES Draft Final Reg Repro		
16. REMARKS The Contractor shall deliver the On-Site Labor Report no later than five (5) days after the end of each reporting month. The report must include as a minimum the following data: Reporting Period: Contract Number (and Order Number, if applicable): Contract Value: Current Funding: Amount Expended in Current Period: Total Expended to Date: Date Submitted: Labor (including subcontractors) - Show employee name, number of hours, and total amount billed for contractor employees working on-site at NRL. If the contractor employees worked on multiple tasks (as defined by the COR), the numbers of hours worked on each task must be shown separately. Travel - Show employee name, number of trip(s), location(s), reason for trip(s) and cost break-out per trip/per travelor. Materials - Provide a decription of material(s), cost break-out by item and identify the use on contract.				COR	0	1	0
				AO CODE	0	1	0
				15. TOTAL →			
G. PREPARED BY NRL CODE 6702		H. DATE	I. APPROVED BY	J. DATE			

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

(2 Data Items)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0002		B. EXHIBIT A		C. CATEGORY: TDP _____ TM- _____ OTHER _____	
D. SYSTEM / ITEM Research and Development		E. CONTRACT / PR NO. N00173-02-R-MM03		F. CONTRACTOR	
1. DATA ITEM NO. A0002		2. TITLE OF DATA ITEM Progress Report		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) N/A		5. CONTRACT REFERENCE See SOW Sections 3.0 - 4.0		6. REQUIRING OFFICE Naval Research Laboratory	
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY Semi-Annually	
8. APP CODE		11. AS OF DATE 180 DAC		12. DATE OF FIRST SUBMISSION 180 DAC	
13. DATE OF SUBSEQUENT SUBMISSION See Blk 16		14. DISTRIBUTION		15. TOTAL	
16. REMARKS Block 13 - 180 days after the end of each subsequent month. Written Progress Report, may be in the form of a letter report or a technical report.		a. ADDRESSEE		b. COPIES	
COR		Draft		Final	
AO Code		Reg		Repro	
3230.MM		1		1	
15. TOTAL		1		1	
1. DATA ITEM NO. A0003		2. TITLE OF DATA ITEM Design Drawings, Documentation, Plans & Manuals		3. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) N/A		5. CONTRACT REFERENCE See SOW Sections 3.0 - 4.0		6. REQUIRING OFFICE Naval Research Laboratory	
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED		10. FREQUENCY ASREQ	
8. APP CODE N/A		11. AS OF DATE See Blk 16		12. DATE OF FIRST SUBMISSION See Blk 16	
13. DATE OF SUBSEQUENT SUBMISSION See Blk 16		14. DISTRIBUTION		15. TOTAL	
16. REMARKS Block 11, 12 & 13 - are applicable as follows: The Contractor shall submit any design drawings, documentation, plans schematics and manuals developed in connection with modified hardware thirty (30) days after completion of task(s).		a. ADDRESSEE		b. COPIES	
COR		Draft		Final	
AO Code		Reg		Repro	
15. TOTAL		1		1	
G. PREPARED BY		H. DATE		I. APPROVED BY	
J. DATE		NRL Code 6702		DD FORM 1522-2-1-82	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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[illegible]

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

PERSONNEL QUALIFICATIONS

The basic research nature of the work requires the use of experienced personnel with a strong background in plasma physics, optics, or electrical engineering. The following details the desired experience under each category of labor sought under the contract.

1. Principal Research Scientist/Engineer

Education: PhD in Physics or Electrical Engineering or related field.

Experience: Ten (10) years experience in plasma physics, optics, accelerator technology, pulsed power physics and/or high power microwave sources and applications required. This experience should include successful management of at least one (1) major research project.

2. Senior Research Scientist/Engineer

Education: PhD in Physics or Engineering or related field.

Experience: Five (5) years experience in plasma physics, optics, accelerator technology, materials science, and/or high power microwave sources.

3. Research Scientist/Engineer

Education: PhD in Physical Science or Engineering or related field or MS in a physical science or engineering.

Experience: Three (3) years experience in plasma physics, optics, accelerator technology, materials science, and/or high power microwave sources.

4. Master Engineer

Education: BS or BA in Mechanical or Electrical Engineering or related field.

Experience: Ten (10) years professional experience in areas including high voltage pulsed power systems, high power microwave tubes, high vacuum systems, mechanical design, and precision machining.

5. Technician

Education: BS or BA in Physical Science, Engineering, or Computer Science or related field.

Experience: Minimum of two (2) years professional experience in optics, electrical systems, laboratory diagnostics, or information technology.

6. Office Automation Assistant

Education: High School Diploma or Vocational School Certificate.

Experience: Minimum of two (2) years professional experience in office automation and administrative support. Qualified to provide database entry and update capabilities. Ability to demonstrate familiarity with Windows or Macintosh operating systems and Microsoft Word or related produces. Experience with a research organization preferred.